

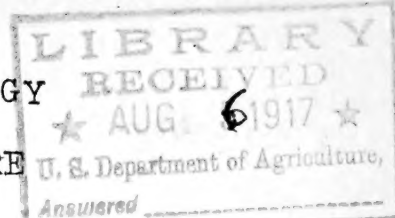
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## MONTHLY LETTER OF THE BUREAU OF ENTOMOLOGY

UNITED STATES DEPARTMENT OF AGRICULTURE



Number 39.

July, 1917

## AMBULANCE FUND

Employees of all branches of the Department have responded most generously to the ambulance fund. The amount received up to the present time being sufficient for three fully equipped motor ambulances, the Office of Markets alone furnishing one.

## STATUS OF EMPLOYEES UNDER THE SELECTIVE DRAFT LAW

The status of employees under the selective service law was indicated in a memorandum issued by the Secretary of Agriculture on July 13, 1917. Copies of this circular have been generally distributed. Any agents who have not received copies should notify the Bureau at once.

It is to be noted that the Department will not recommend exemptions in the case of persons serving under temporary appointments.

## BUREAU VISITORS DURING JULY

Prof. K. W. Dammermann of Java.

Prof. H. A. Garman of the University of Kentucky.

Prof. E. R. Scholl, Entomologist, Texas Department of Agriculture.

Prof. F. B. Paddock, Entomologist, Texas Experiment Station.

Prof. S. W. Bilsing, Professor of Entomology, Texas A. & M. College.

Mr. E. L. Ayers, Chief of Nursery Inspection Service, Texas Department of Agriculture.

## ENTOMOLOGICAL PUBLICATIONS DESIRED BY THE BUREAU LIBRARY

Since July 1913 articles by members of the Bureau which have appeared in nondepartmental publications have been recorded and filed in the Bureau library. These now number nine hundred and ninety four. That this record may be complete, all members of the Bureau are urged to send to the library copies of such separates by them as soon as issued.



The library is sending a request to all State entomologists, Agricultural Experiment Stations; State Boards of Health, State Horticultural Societies and State Councils of Defense to be put on their mailing lists to receive war literature on insects. Field men of the Bureau are asked to send to the Library publications of this nature or a memorandum of any especially timely ones coming to their attention. It is certain that libraries will be more and more looked to for complete files of war literature pertaining to their special subjects and the library of this Bureau will aim to preserve as complete a file as possible of these emergency entomological publications both for our own present information and for their historical value.

The Librarian of the Department has recently been appointed Chairman of the Food Information Committee, a sub-committee of the American Library Association War Service Committee.

#### REPORT OF THE EDITORIAL SECTION FOR 1916-17.

The report of the Editorial Section to the Chief of the Bureau shows a total of 132 manuscripts handled during the year ended June 30, 1917. This was made up of 76 publications issued, 44 publications left in the press or with the Division of Publications, and 12 manuscripts on hand. Owing to the press of emergency work, produced by the entrance of this country in the world war, many publications which ordinarily would have been issued, are still pending.

#### WANTED.

Sendings of the following material, as indicated, will be appreciated, and due credit will be given, especially in such cases wherein notes are submitted.

MATERIAL WANTED	ADDRESS
Chalcidid parasites and notes on same.....	E. J. Newcomer, Portland, Ore.
Eggs of Hemiptera: Notes on same: Records of predaceous Hemiptera:	E. H. Gibson, U. S. National Museum.
Oestridae.....	Dr. C. H. T. Townsend, U. S. National Museum.
Insects infected with bacterial disease.....	Dr. G. F. White, Bureau of Entomology.
Insects infected with fungous disease: Scale insects especially infected with fungous disease..	Dr. A. T. Speare, Bureau of Entomology.

The following is a summary of the work done by the Bureau of Entomology and Plant Quarantine, United States Department of Agriculture, during the year 1917. The Bureau has been very busy in the past year, and has accomplished a great deal of work. It has been very successful in its efforts to control the various insects which are destructive to our crops and fruits. It has also been very successful in its efforts to control the various diseases which are caused by insects. The Bureau has been very successful in its efforts to control the various insects which are destructive to our crops and fruits. It has also been very successful in its efforts to control the various diseases which are caused by insects. The Bureau has been very successful in its efforts to control the various insects which are destructive to our crops and fruits. It has also been very successful in its efforts to control the various diseases which are caused by insects.

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# MATERIAL WANTED

## ADDRESS

Live specimens: Cowpea weevil [Bruchus (Pachymerus) chinensis]: Pink cornworm (Batrachedra rileyi).....	Dr. F. H. Chittenden, Bureau of Entomology.
Larvae and notes on LeConte's sawfly (Diprion lecontei) or any species of Diprion.....	S. A. Rohwer, East Falls Church, Va.
Cutworms, live; for taxonomic studies.....	E. C. Crumb, Clarksville, Tenn.
Fleas.....	F. C. Bishopp, Dallas, Tex.
Live specimens: Larvae of horn-tails ( <u>Tremex</u> , <u>Xiphydria</u> , <u>Xeris</u> , <u>Sirex</u> , and <u>Urocerus</u> ....	William Middleton, Eastern Field Station, East Falls Church, Va.
Live specimens: <u>Corydalis</u> adults, for anatomical purposes.....	Dr. A.G. Boving or F.C. Craighead, Eastern Field Station, East Falls Church, Va.
Live specimens: Spinach aphid ( <u>Myzus persicae</u> ) and potato aphid ( <u>Macrosiphum solanifolii</u> )	Dr. F. H. Chittenden, Bureau of Entomology.
News clippings relating to entomology.....	Dr. L. O. Howard, Bureau of Entomology.
News clippings (especially) relating to "insects as food for man".....	Dr. L. O. Howard, Bureau of Entomology.
Entomological contributions and articles published outside of the Department of Agriculture.	Miss Mabel Colcord, In Charge of Library, Bureau of Entomology, Washington, D. C.

## LIBRARY

Miss Mabel Colcord, In Charge.

## NEW BOOKS:

Cowan, Frank.—Curious facts in the history of insects. Philadelphia, 1865. 396p.

Graig, C. F.—The malarial fevers, haemoglobinuric fever and the blood protozoa of man. N.Y., 1909. 477p. illus.

Dunn, L. H.—The coconut-tree caterpillar (Brassolis isthmia) of Panama. (Proceedings of the Medical Association of the Isthmian Canal Zone...v.9, pt. 1, p. 32-48, pl. 1-5. Jan-June, 1916).



UNCLASSIFIED

live specimens: Cowles weevil  
(Buccinus) (Pachymachus) (Buccinus)  
(Buccinus) (Pachymachus) (Buccinus)  
(Buccinus) (Pachymachus) (Buccinus)  
(Buccinus) (Pachymachus) (Buccinus)

Larvae and pupae of *A. fuscipes*  
found in the same place as  
the pupae of *A. fuscipes*

.....studies.

SECRET

Xenia: 8900; 8901; 8902  
Talia (Tienia): 8903  
Live apocynum: 8904

1. 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348

Five specimens of *Myrica maritima* (L.) Link. (Myrica maritima) -  
specimens of *Myrica maritima* (L.) Link. (Myrica maritima) -

NEWA OLLIPINGA RELATIA  
MELIUS

News clipping (left column)  
Letter to "Herald" re "man"  
"man"

the Department of Anatomical and Histological Sciences

NEW BOOKS:



Gage, S. H.—The microscope; an introduction to microscopic methods and to histology... 12th ed. Ithaca, N.Y. 1917. 472p. illus. Bibliography, p. 445-452.

Kerschbaumer, Fritz.—Malaria, ihr Wesen, ihre entstehung und ihre Verhütung. Wien u. Leipzig, 1901. 170p. 61 pl.

Lelean, P. S.—Sanitation in war. Ed. 2. London 1917. 335p. illus.

Shelford, R. W. C.—A naturalist in Borneo, edited by E. B. Poulton. London, 1916. 331p. illus.

Shipley, E. E.—Studies in insect life. London, 1917. 338p.

Sollmann, T. H.—A laboratory guide in pharmacology. Philadelphia and London, 1917. 355p. illus.

U. S. War Department.—Regulations for the army of the United States, 1913, corrected to April 15, 1917 (Changes, Nos. 1 to 55). Washington, D. C. 1917. 416p.

#### BEE CULTURE.

E. F. Phillips, Apiculturist in Charge.

Dr. E. F. Phillips went to Denver, Colo., the last of the month to attend a meeting of beekeepers of Colorado and adjacent States.

Kennith Hawkins left July 9 to attend State meetings of county agents in Oklahoma, Texas and other Southern States. He will spend the latter part of August in Virginia, holding local meetings of beekeepers in cooperation with county agents.

A. P. Sturtevant recently made a trip in New Jersey and Massachusetts studying European foulbrood conditions.

C. E. Bartholomew is recovering from his attack of pleurisy and is again taking up his work in Tennessee.

Miss Myrtle Duckett resigned July 23 to accept a position in the War Department.

#### DECIDUOUS FRUIT INSECT INVESTIGATIONS.

A. L. Quaintance, Entomologist In Charge.

Robert B. McKeown, a graduate of the Colorado Agricultural College, and Assistant in that institution, has been appointed as Scientific Assistant in the Bureau and assigned under John B. Gill to pecan insect investigations in Texas. Messrs. Gill and McKeown are now in Texas in consultation with the authorities of the Texas Agricultural College and Experiment Station, and will locate a laboratory at a point where conditions are most favorable for the work.

Page 8. The manuscript contains no further information regarding the methods used to identify the individuals who were interviewed.

Shelford, H. W. 1900  
Soulton, J. 1900

and will locate a laboratory  
responsible for the work  
Office of the Texas A. & M.  
Hall and McKee and now is  
der John S. Gill to have  
appointed as Researcher in  
Experimental College

Warren D. Whitcomb, a graduate of the Massachusetts Agricultural College, has been appointed as Scientific Assistant in the Bureau and has been detailed to assist A. J. Flebut in connection with the investigation of chestnut weevils and other nut insects in the northern states.

William O. Ellis, Instructor in Forest Entomology in the Syracuse University, has been appointed as Scientific Assistant and has been assigned for the present to work in Washington in connection with insecticide studies and orchard-insect survey work.

F. E. Brooks, in charge of the Bureau laboratory at French Creek, W. Va., visited Michigan and Wisconsin during the latter part of June in connection with his studies of apple-tree and other borers.

Chester I. Bliss has been appointed as Field Assistant to assist in connection with investigations of the grape berry-moth at Sandusky, Ohio.

G. A. Rünner, formerly employed under the direction of Dr. W. D. Hunter, has been transferred to the Office of Deciduous Fruit Insect Investigations, and assigned to duty at Sandusky, Ohio, in connection with grape-insect investigations.

#### FEDERAL HORTICULTURAL BOARD.

C. L. Marlatt, Chairman.

G. E. Moynette, formerly Assistant State Entomologist of Oregon, has been appointed entomological inspector of the Board and assigned to duty in Washington.

H. F. Dietz is now in New York investigating the fumigation of orchids. The experimental work conducted by Messrs. Süsser and Dietz with orchids has demonstrated that orchids can be safely fumigated with one ounce of sodium cyanid in a 20-inch vacuum at an exposure of 40 minutes without injury, provided reasonably healthy plants are used; in fact, with healthy plants as strong a dose as four ounces of cyanid has been used under the same conditions without killing the plants. A month after treatment the plants so treated are making new growth, both roots and buds.

Mr. A. D. Borden has recently completed an inspection of the Plant Introduction Garden at Chico, Cal., and is now with Mr. Woglum carrying out the program announced in the last letter.

The Mexican border control in relation to the pink bollworm has been readjusted as follows, under the general field direction of T. C. Barber:



El Paso - J. C. Hamlin and W. W. Maxwell, Jr.  
 Eagle Pass - J. A. Dew and G. G. Harris.  
 Laredo - O. D. Deputy and T. E. Hagan.  
 Brownsville - A. C. Mason.

These assignments cover the principal ports of entry. The supervision of the minor parts of entry are divided among the ports named, and the work is accomplished in cooperation with the customs service and with such occasional visits from the inspectors of the Board as the requirements may necessitate.

An estimate has been prepared for the Urgent Deficiency Bill of this session, calling for an appropriation of \$500,000 to still further safeguard the United States from the pink bollworm. A conference was held on July 17 on this work, participated in by representatives appointed by the Governor of Texas, namely, the Commissioner of Agriculture and Messrs. Ayers and Scholl, and by Mr. Paddock, representing the experiment station, and Mr. Ousley, temporarily acting as Assistant to the Secretary of Agriculture, representing the State at large and particularly the State Extension Service. There was also a committee of planters, representing the Lower Rio Grande Valley, present. The work proposed under the appropriation requested is the establishment of a cotton-free zone in Texas along the Mexican border, the survey and stamping out of local points of infestation in Mexico near the Texas border, and general surveys of the infested district in the Laguna and elsewhere in Mexico to be the basis of determining the advisability of undertaking exterminative work against the pink bollworm in Mexico generally.

#### FOREST ENTOMOLOGY.

A. D. Hopkins, Entomologist In Charge.

Dr. Hopkins spent the first week of the month in the Washington office and returned to his work at Kanawha Station, West Virginia.

Jacob Kotinsky spent June 27 in Philadelphia where, with the assistance of F. M. Trimble of the Pennsylvania State Zoological Service and the Federal Horticultural Board, elm-leaf beetle (Calerucella luteola Mull.) eggs were located and a colony of parasites received by Dr. Howard from M. F. Picard of the Ecole Nationale d'Agriculture, Montpellier, France, was released. Small colonies of this parasite were also released in Ithaca, New York by Prof. Robt. Matheson and by Mr. Kotinsky in Washington, D. C. No prediction as to results can be made as yet.

William Middleton is very anxious to obtain biological material of horntails (Siricoidea) but especially determined larvae or larvae with a sufficient quantity of the host plant for rearing. In making notes please give host, locality, date of collection, relative abundance, etc. Collections of adults with data will be valuable additions to the collection. The larvae of the horntails are all wood borers living in dead or dying coniferous or deciduous trees. The species of the Genera Tremex and Xiphydria

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live in deciduous trees while those of the genera Xeris, Sirex, and Urocetus live in coniferous trees. The material should be sent to the Eastern Field Station, East Falls Church, Virginia.

#### SOUTHERN FIELD CROP INSECT INVESTIGATIONS.

W. D. Hunter, Entomologist in Charge.

Dr. W. D. Pierce is on a general trip through the South. He will visit the laboratories at Madison, Florida; Mound, La., Clarksville, Tenn., Dallas, Texas; Uvalde, Texas, and El Centro, California.

E. S. Chamberlin was appointed a scientific assistant on July 5, and has been assigned to work on tobacco insects under F. L. McDonough, Quincy, Florida.

G. D. Pylant was appointed a temporary field assistant for work on cotton insects at Madison, Florida, under G. D. Smith.

Geo. E. Quinter was appointed a field assistant for temporary service at the laboratory at Clarksville, Tenn.

G. N. Wolcott now serving under temporary appointment on work relating to sugar-cane insects held the first number drawn under the selective service act in his home precinct in New York.

G. D. Pylant and J. D. Smith have also been drafted into the military service.

#### TROPICAL AND SUBTROPICAL FRUIT INSECT INVESTIGATIONS.

C. L. Marlatt, Entomologist In Charge.

Harold Morrison, whose trip of exploration to the Virgin Islands and in the West Indies has been referred to in previous letters, has completed his work in the Virgin Islands and Porto Rico and is probably now in Santo Domingo. Some very interesting communications have been received from him in relation to this work, and a good deal of valuable material. Valuable material is also being received from the collaborators appointed in Central and South American countries in connection with the study of the fruit flies and other insect pests of such countries.

The monthly conditions of the work in Florida and California are covered in the Emergency Entomological Service Bulletin.

A general bulletin (Dept. Bull. 491) on the melon fly by Back and Pemberton has just been issued. A paper has just been received from Mr. Pemberton on the subject of fruit-fly parasites in Hawaii during 1916.



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## TRUCK CROP INSECT INVESTIGATIONS.

F. H. Chittenden, Entomologist In Charge.

H. O. Marsh, who, for several years, has been in charge of sugar beet and truck crop insect investigations at Rocky Ford, Colo., visited the Bureau for consultation, and will look over the field on Long Island with a view to establishing a station there where one was formerly maintained but abandoned.

H. R. Shoemaker has been appointed for temporary work at Arlington Farms where this branch of the Bureau maintains a truck garden for experimental purposes.

Boyd L. Boyden, engaged in work on sugar beets at Pasadena, Calif., has resigned, his resignation taking effect July 31.

F. B. Milliken, employed for some time in Kansas as Scientific Assistant, has resigned to take up work on stored product insects under the direction of Dr. E. A. Back.

A. B. Duckett, formerly employed in this branch of the Bureau, has resigned but will continue along the same lines as formerly in stored product insects under the direction of Dr. E. A. Back.

Miss Pauline Margaret Johnson, Scientific Assistant, resigned, effective August 15. Miss Johnson served the Bureau faithfully for six years.

Mr. F. M. Wadley will be in charge of the Station at Wichita, Kans., vice F. B. Milliken.

H. L. Weatherby will be in temporary charge of the station at Rocky Ford, Colo., formerly in charge of Mr. Marsh.

## CEREAL AND FORAGE INSECT INVESTIGATIONS.

W. R. Walton, Entomologist In Charge.

J. J. Davis reports that the Hessian-fly wheat-sowing experimental plots have been cut and results have proven highly satisfactory. The substation at Nashville, Ill., will be continued and the work will not be transferred to southern Indiana, as had been previously planned.

J. S. Wade has been transferred from the Wellington Field Station to Washington, D. C., where he will assist Mr. Walton in the office work for the present.

F. H. Gates, formerly attached to the Tempe, Arizona, station, has resigned from the service, effective July 1.

J. W. Bailey has been appointed to fill the vacancy caused by Mr. Gates' resignation.

R. H. C. 1915

H. C. 1915

charge of sugar  
Rocky Ford, Colo.  
look over the  
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work at Allie  
a truck

Pasadena, Calif.  
July 31

Scientific  
product

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as formerly  
Dr. H. A. B.

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Wichita, Kans.

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Field Station to

station, has

by Mr. C.

W. T. Emery has been transferred from Charlottesville, Va., to the Wellington [Kansas] field station, to fill the vacancy caused by Mr. Wade's transfer to Washington.

Frederick W. Poos has been appointed to fill the vacancy caused by Mr. Emery's transfer.

W. C. Cartwright has been appointed Scientific Assistant and assigned to the Knoxville, Tenn., station for the present.

Prof. P. H. Hertzog has been appointed Field Assistant and assigned temporarily to the Carlisle, Pa., station.

Philip Luginbill, who was ill for several weeks with typhoid fever, is again at his post of duty in charge of the Columbia, S. C., station.

H. L. Dozier is assisting Mr. Luginbill for the summer months.

W. H. Berry has been transferred from Charleston  
Va., to the Wellington (Kansas) office, to fill the vacancy  
caused by Mr. Wabbe's transfer.

Respectfully,  
Sincerely,  
W. H. Berry

Assistant and Secretary  
present.

From the  
and

with typhoid  
the

summer